

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently amended): A device information displaying system for displaying device internal information of one or more information devices, comprising:

a memory for storing computer-readable instructions;

a processor for executing the instructions, wherein the instructions, when executed, causes the processor to function as:

(a) an information browser comprising:

an acquisition unit which acquires document data described in a markup language;

an analysis unit which analyses the acquired document data;

a generation unit which generates a document-based layout tree containing layout information of the acquired document data based on result of the analysis; and

a rendering unit which makes a display of the acquired document data based on the generated document-based layout tree; and

(b) a device information provider comprising:

an acquisition unit which acquires the device internal information of the one or more information devices, wherein the device internal information is not described in HTML;

a generation unit which generates a device-information-based layout tree containing layout information of the device internal information, wherein:

the device-information-based layout tree is different from the acquired document data,

the device-information-based layout tree is not analyzed by the analysis unit that analyzed the acquired document data, and

the device-information-based layout tree is not generated by the generation unit that generated the document-based layout tree; and

a providing unit which provides the generated device-information-based layout tree to the rendering unit of the information browser without creating an HTML html document,

wherein the rendering unit makes a display of the device internal information based on the device-information-based layout tree provided from the providing unit of the device information provider.

Claim 2 (Previously presented): The device information displaying system according to claim 1, wherein the device information provider has stylized data corresponding to the type of the information device to be used as a base of the device-information-based layout tree.

Claim 3 (Original): The device information displaying system according to claim 2, wherein the stylized data are prepared in multiple types corresponding to the types of the information devices.

Claim 4 (Previously presented): The device information displaying system according to claim 1, wherein the device information provider further has a function of writing operation information, including at least one of setting information and a control instruction, into the one or more information devices.

Claim 5 (Previously presented): The device information displaying system according to claim 4, wherein the device information provider includes a device information interface which functions as an interface for receiving a request signal according to a prescribed procedure and executing the acquisition of the device internal information from the one or more information devices and the writing of the operation information according to the request signal.

Claim 6 (Previously presented): The device information displaying system according to claim 5, wherein:

the information browser and the device information provider are implemented in one information device, and

the device information interface acquires the device internal information of the one information device.

Claim 7 (Original): The device information displaying system according to claim 5, wherein the device information interface is connected to the one or more information devices via a wired and/or wireless network and acquires the device internal information from the one or more information devices via the network.

Claim 8 (Original): The device information displaying system according to claim 1, wherein the one or more information devices include at least one of a cellular phone, a home information appliance and a vehicle-mounted device.

Claim 9 (Original): The device information displaying system according to claim 1, wherein the device internal information includes at least one of information on the types of the information devices and information on peripheral devices of each of the one or more information devices.

Claim 10 (Currently amended): A computer program product comprising a computer-readable storage medium containing computer-readable instructions that cause a computer to function as:

(a) an information browser comprising:

an acquisition unit which acquires document data described in a markup language;
a generation unit which analyses the acquired document data;
an analysis unit which generates a document-based layout tree containing layout information of the acquired document data based on result of the analysis; and
a rendering unit which makes a display of the acquired document data based on the generated document-based layout tree; and

(b) a device information provider comprising:

an acquisition unit which acquires device internal information of one or more information devices, wherein the device internal information is not described in HTML;
a generation unit which generates a device-information-based layout tree containing layout information of the device internal information of the one or more information devices, wherein:

the device-information-based layout tree is different from the acquired document data,

the device-information-based layout tree is not analyzed by the analysis unit that analyzed the acquired document data, and

the device-information-based layout tree is not generated by the generation unit that generated the document-based layout tree; and

a providing unit which provides the generated device-information-based layout tree to the rendering unit of the information browser without creating an html HTML document, wherein the rendering unit makes a display of the device internal information based on the device-information-based layout tree provided from the providing unit of the device information provider.

Claim 11 (Previously presented): The computer program product according to claim 10, wherein the device information provider has stylized data corresponding to the type of the information device to be used as a base of the device-information-based layout tree.

Claim 12 (Previously presented): The computer program product according to claim 11, wherein the stylized data are prepared in multiple types corresponding to the types of the information devices.

Claim 13 (Previously presented): The computer program product according to claim 10, wherein the device information provider further has a function of writing operation information, including at least one of setting information and a control instruction, into the one or more information devices.

Claim 14 (Previously presented): The computer program product according to claim 13, wherein the device information provider includes a program interface which receives a request according to a prescribed procedure and executes the acquisition of the device internal information from the one or more information devices and the writing of the operation information according to the request.

Claim 15 (Previously presented): The computer program product according to claim 14, wherein:

the information browser and the device information provider are implemented in one information device, and

the program interface acquires the device internal information of the one information device.

Claim 16 (Previously presented): The computer program product according to claim 14, wherein the program interface is connected to the one or more information devices via a wired and/or wireless network enabling communication and acquires the device internal information from the one or more information devices via the network.

Claim 17 (Previously presented): The computer program product according to claim 10, wherein the one or more information devices include at least one of a cellular phone, a home information appliance and a vehicle-mounted device.

Claim 18 (Previously presented): The computer program product according to claim 10, wherein the device internal information includes at least one of information on the types of the information devices and information on peripheral devices of each of the one or more information devices.

Claim 19 (Currently amended): An information browser program product comprising a non-transitory computer-readable storage medium containing computer-readable instructions that cause a computer to execute the functions of:

~~a browser function of making access to a Web server according to a prescribed protocol, along with an analysis function of acquiring and analyzing document data described in a markup language;~~

~~a generation function of generating a document-based layout tree containing layout information of the acquired document data based on result of the analysis;~~

~~a rendering function of making a display of the acquired document data based on the generated document-based layout tree; and~~

~~a device information providing function of acquiring device internal information of one or more information devices according to a prescribed program interface,~~

~~generating a device information-based layout tree containing layout information of the acquired device internal information, and~~

~~displaying the device internal information based on the device information-based layout tree through the display function without generating an HTML document.~~

acquiring document data described in a markup language;

acquiring device internal information of one or more devices, wherein the device internal information is not described in HTML;

analyzing the markup language structure of the acquired document data;

generating a document-based layout tree containing layout information of the acquired document data based on the result of the analysis;

generating a device-information-based layout tree containing layout information of the acquired device internal information without creating an HTML document, wherein:

the device-information-based layout tree is different from the acquired document data,

the device-information-based layout tree is not analyzed by the instructions that analyzed the acquired document data, and

the device-information-based layout tree is not generated by the instructions that generated the document-based layout tree;

rendering, for display, the acquired document data based on the generated document-based layout tree; and

rendering, for display, the acquired device internal information based on the generated device-information-based layout tree.